Reply to Office Action dated December 8, 2006

REMARKS

Applicants respectfully request the Examiner to reconsider and again examine the claims in view of the remarks below in accordance with the provisions of 37 C.F.R §1.116.

Claims 1-20 and 24-29 are pending in the application. Claims 1-20 and 24-29 are rejected. No claims have been added, cancelled or amended by this Response.

Applicant's attorney would like to thank Examiner Brier for his diligent Response to Arguments set forth in his Office Action dated December 8, 2006. Applicants do not agree with the Examiner's position for reasons already of record in this case and Applicants also set forth new arguments below.

The Rejections under 35 U.S.C. §103(a)

The Examiner maintains his rejection of Claims 1-20 and 24-29 under 35 U.S.C. §103(a) as being unpatentable over an article entitled "Jazz: An Extensible Zoomable User Interface Graphics Toolkit," (hereinafter the "Jazz article"), in view of the Applicant's admitted prior art pertaining to three-dimensional graphics circuit cards.

Applicant maintains his position that Claim 1 is patentably distinct over the Jazz article, whether taken alone or in combination with the Applicant's admitted prior art, since the cited references neither describe nor suggest "...generating scene graph data ...including at least one two-dimensional object; storing the scene graph data in a three-dimensional graphics circuit module...generating a scene graph display command...associated with the at least one two-dimensional object... interpreting the scene graph display command with the three-dimensional graphics circuit module... and displaying at least one two-dimensional image on the graphical display with the three-dimensional graphics circuit module, wherein the at least one two-

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dimensional image is associated with the at least one two-dimensional object..." as set forth in Claim 1.

Applicant submits that the combination used by the Examiner does not contemplate use of the three-dimensional graphics circuit module to <u>store</u> scene graph data <u>including a two-dimensional object</u>, to <u>interpret</u> a scene graph display command <u>associated with the two-dimensional object</u>, and to <u>display</u> the two-dimensional object as claimed.

As made of record in the response filed on September 18, 2006, during a telephone interview which took place on or about September 15, 2006, the Examiner and Applicant agreed that the "admitted prior art" relied upon by the Examiner in this and past Office Actions corresponds to the position that https://doi.org/10.1081/jhp.10.2081/jhp.2081/jhp.10.2081/jhp.10.2081/jhp.10.2081/jhp.10.2081/jhp.10.2081/jhp.10.2081/jhp.10.2081/jhp.10.2081/jhp.2081/jhp.10.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/jhp.2081/

It has also been agreed that the admitted prior art <u>does not</u> include any indication that <u>two-dimensional scene graph data</u> is stored in a three-dimensional graphics circuit board. To the extent that the Office Action dated December 8, 2006 implies that the "admitted prior art" extends in any way past the above-stated agreed to definition, Applicants take issue with such implication and do not agree that the "admitted prior art" extends past that which is specifically stated above, i.e., that in prior art systems, <u>three-dimensional data</u> is stored in a three-dimensional graphics circuit board.

With respect to the Jazz article, the Examiner has taken the position that the Jazz article describes use of the three-dimensional graphics circuit module to <u>store</u> scene graph data including a two-dimensional object, to <u>interpret</u> a scene graph display command associated with the two-dimensional object, and to <u>display</u> the two-dimensional object.

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The Examiner repeatedly concludes in the Office Action that the Jazz article suggests modifying Jazz and the prior art three-dimensional circuit module. <u>This conclusion, however, is totally unsupported</u>.

In the Office Action, the Examiner, for the first time, refers to the OpenGL software mentioned in the Jazz article. Specifically, on Page 3 of Office Action dated December 8, 2006, the Examiner states:

...Jazz does suggest... to modify the prior art ... because Jazz discusses the desirability of processing two dimensional objects in a manner similar to the processing of three dimensional objects by using scene graphs. Additionally Jazz makes reference to OpenGL on page 173 second column paragraphs 1 and 5 which is an API to the prior art three-dimensional graphics circuit module...(see page 3 of Office Action dated December 8, 2006)

As an initial matter, <u>discussing the desirability of taking some action is not the same as teaching how to modify a prior art system or reference</u>. The mere fact that the prior art <u>could</u> be modified is not sufficient to establish a prima facie case of obviousness.

Furthermore, the Examiner's reliance on the Jazz article at page 173 column 2, paragraphs 1 and 5 is misplaced. These paragraphs of the Jazz article state:

Typical 3D renderers, such as OpenGL, support very efficient image and triangle rendering, but do not have direct support for high quality scalable fonts, 2D complex polygons line styles, and other standard business graphics. We have discussed these issues in depth previously [7]. We are also interested in developing scene graph nodes that apply to 2D application domains. For this domain, many of the nodes found in 3D scene graph systems are not appropriate.

Jazz uses the Java2D renderer, and is organized to support efficient animation, rapid screen updates, and high quality stills. While we could have written Jazz using other rendering engines, such as OpenGL, we picked Java2D because of its clean design and focus on high-quality 2D graphics. As previously mentioned, OpenGL does not support business graphics well. In addition, using Java2D

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allows us to support embedded Swing widgets, which would be impossible with OpenGL.

These paragraphs from the Jazz article clearly <u>do not</u> describe or suggest use of the threedimensional graphics circuit module to store scene graph data including a two-dimensional object as called for in Claim 1.

At best, the Jazz article mentions the possibility that the Jazz article <u>could have been</u> written using OpenGL. However, the fact that Jazz or any other prior art system <u>could have been</u> modified in a particular manner is not a substitute for teaching or suggesting how to modify a prior art system or a prior art reference. Neither the Jazz article nor Applicant's admitted prior supply any such teaching as to how the prior art references could have been modified so that a three-dimensional graphics circuit card can be used to display <u>a two-dimensional object</u> on a display.

Applicants have described and claimed a particular technique for using a threedimensional graphics circuit module to render a 2D image. Applicant's Claim 1, for example, specifically calls for "...generating scene graph data... including at least one two-dimensional object; storing the scene graph data [including the two-dimensional object] in a threedimensional graphics circuit module ... generating a scene graph display command...associated with the at least one two-dimensional object ... interpreting the scene graph display command with the three-dimensional graphics circuit module... and displaying at least one twodimensional image on the graphical display with the three-dimensional graphics circuit module."

The Examiner fails to point out where any of these steps are mentioned in the cited references. The claim elements are simply not present in the prior art references relied upon by the Examiner. It is thus impossible for the combination of references asserted by the Examiner to render Claim I obvious.

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The claimed invention generates a display using two-dimensional scene graph data stored in a three-dimensional graphics circuit module. In contrast, as recognized by the Examiner, the display in the Jazz article is instead rendered by the computer central processing unit (CPU) via conventional Java2D software. Thus, the Jazz article does not use two-dimensional scene graph data stored in a three-dimensional graphics circuit module to generate the display.

The Examiner has essentially relied upon a single line from the prior art reference, to the exclusion of other parts of the reference necessary to gain a full appreciation of what the reference fairly teaches. This is not permitted under 35 U.S.C. §103.

The Jazz article focuses on the use of simple "paint" commands to render two-dimensional (2-D) images. Thus, a fair reading of the Jazz reference as a whole, clearly can only lead one to conclude that the brief mention to OpenGL in the Jazz Article refers to the use of OpenGL's so-called "direct mode," in which scene graph data is not stored to a three-dimensional graphics card nor rendered by a local processor. The direct mode of OpenGL is similar to the use of paint commands in the sense that the CPU rather than the three-dimensional graphics card generates the resulting image. In fact, as is known, recent versions of Java2D (an older version of which is used by the Jazz article) employ OpenGL in the direct mode to render two-dimensional objects.

It is, however, only in OpenGL's so-called "indirect mode" that OpenGL provides storage of three-dimensional scene graph data on the graphics circuit board (or elsewhere) and subsequent interpretation and rendering by the local processor disposed on the graphics circuit board in response to received three-dimensional scene graph display commands.

Thus, contrary to the Examiner's assertion, the Jazz article, by merely mentioning OpenGL, does not teach or contemplate that scene graph data <u>including a two-dimensional object</u> can be <u>stored</u> in a conventional three-dimensional graphics circuit card and can be <u>rendered by</u> the three-dimensional graphics card in response to two-dimensional display commands.

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Applicant further submits that the Jazz article teaches away from the arrangement suggested by the Examiner, since the Jazz article, at the top of the second column of page 173 states "[t]ypical 3D renderers, such as OpenGL...do not have direct support for high quality scalable fonts, 2D complex polygons, line styles, and other standard business graphics." The Jazz article also states "...many of the nodes found in 3D scene graph systems are not appropriate." Therefore, the Jazz article teaches a different solution, Java2D, in order to render two-dimensional objects.

In view of the above, Applicant submits that Claim 1 is patentably distinct over the Jazz article, whether taken alone or in combination with Applicant's admitted prior art.

Claims 2-7, 24, and 25 depend from and thus include the limitations of Claim 1. Thus, Applicant submits that Claims 2-7, 24, and 25 are patentably distinct over the cited references at least for the reasons discussed above in conjunction with Claim 1.

Applicant submits that Claim 25 is further patentably distinct over the Jazz article, whether taken alone or in combination with Applicant's admitted prior art, since the cited references neither describe nor suggest "... the three-dimensional graphics circuit module is adapted to generate the entire graphical display via the local processor," as set forth in Claim 25. In OpenGL's direct mode, described above, the local processor on the three-dimensional graphics card does not generate the display. Furthermore, it should be understood that the claimed "display" includes the two dimensional object set forth in Claim 1. Generation of such a display having the two dimensional object entirely by the claimed local processor is not contemplated by the Jazz article nor by the Applicant's admitted prior art.

For reasons described above in conjunction with Claim 1, Applicant submits that independent Claim 8 is patentably distinct over the Jazz article, whether taken alone or in combination with the Applicant's admitted prior art, since the cited references neither describe

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nor suggest "...instructions for generating scene graph data... including at least one two-dimensional object; instructions for storing the scene graph data in a three-dimensional graphics circuit module...; instructions for generating a scene graph display command associated with the at least one two-dimensional object; instructions for interpreting the scene graph display command with the three-dimensional graphics circuit module; and instructions for displaying at least one two-dimensional image on the graphical display with the three-dimensional graphics circuit module, wherein the at least one two-dimensional image is associated with the at least one two-dimensional object," as set forth in Claim 8.

Claims 9-14, 26, and 27 depend from and thus include the limitations of Claim 8. Thus, Applicant submits that Claims 9-14, 26, and 27 are patentably distinct over the cited references at least for the reasons discussed above in conjunction with Claim 8.

For reasons discussed above in conjunction with Claims 1 and 25, Applicant submits that Claim 27 is further patentably distinct over the Jazz article, whether taken alone or in combination with Applicant's admitted prior art, since the cited references neither describe nor suggest "... the three-dimensional graphics circuit module is adapted to generate the entire graphical display via the local processor," as set forth in Claim 27.

For reasons described above in conjunction with Claim 1, Applicant submits that independent Claim 15 is patentably distinct over the Jazz article, whether taken alone or in combination with the Applicant's admitted prior art, since the cited references neither describe nor suggest "... a display processor having <u>a scene graph display command generator for generating a scene graph display command associated with scene graph data including at least one two-dimensional object; and a three-dimensional graphics circuit module coupled to the display processor, wherein the three-dimensional graphics circuit module has a local processor, and wherein the three-dimensional graphics circuit module is adapted to generate the graphical display via the local processor, wherein the three-dimensional graphics circuit module is adapted to store the scene graph data, and wherein the three-dimensional graphics circuit</u>

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module is adapted to interpret the scene graph display command, resulting in a display of at least one two-dimensional image on the graphical display, wherein the at least one two-dimensional image is associated with the at least one two-dimensional object," as set forth in Claim 15.

Claims 16-20, 28, and 29 depend from and thus include the limitations of Claim 15. Thus, Applicant submits that Claims 16-20, 28, and 29 are patentably distinct over the cited references at least for the reasons discussed above in conjunction with Claim 15.

For reasons discussed above in conjunction with Claim 1 and 25, Applicant submits that Claim 29 is further patentably distinct over the Jazz article, whether taken alone or in combination with Applicant's admitted prior art, since the cited references neither describe nor suggest "... the three-dimensional graphics circuit module is adapted to generate the entire graphical display via the local processor," as set forth in Claim 29.

In view of the above, Applicant submits that the rejection of Claims 1-20 and 24-29 under 35 U.S.C. §103(a) should be removed.

In view of the above Remarks, Applicant submits that the claims and the entire case are in condition for allowance and should be sent to issue and such action is respectfully requested.

It is submitted that this amendment places the application in condition for allowance or in better form for consideration on appeal, and thus, entry of this amendment is respectfully requested under the provisions of 37 C.F.R. §1.116.

The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Response or this application.

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Dated: Morch 7, 200/

The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845, including but not limited to, any charges for extensions of time under 37 C.F.R. §1.136.

Respectfully submitted,

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